PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE )

In re Application

Inventor(s): Wingyu Leung, et al.

			g, <u></u>	) Art Unit: 2133
Appl	ication	No.: 10	/645,861-7697	) Art Unit: 2133
Filed	: 8/20/	2003		) Examiner: Stephen M. Baker )
Title	TRAN		NT ERROR CORRECTING	) ) _)
		IN	FORMATION DISCLOSURE:	STATEMENT UNDER 37 C.F.R. §1.97
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	mission Box 14	er for Pa	tents	
		VA 223	13-1450	
Sir:				
	Liste	d below	or on an attached Form PTO-144	9 is information known to applicant(s). A copy of each
listed	publica	ation and	non-U.S. patent, is being submitt	ed herewith, along with a concise explanation of
	-		gn language, if any, pursuant to 3	
				nformation be considered by the Examiner and be made o
recon				-1449 is enclosed, the Examiner is requested to initial and
			e with MPEP § 609.	1115 is encosed, the Estatines is requested to minim the
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staten	nent is,	or is con	isidered to be, material to patental	utity as defined in 37 C.F.R. § 1.56.
	This	statemen	nt qualifies under 37 C.F.R. § 1.97	, subsection (b) because (check all that apply):
		(1)		s of the application filing date and is other than a application under § 1.53(d)
		(2)	It is being filed within 3 month  — OR —	s of entry of a national stage
		(3)	It is being filed before the mail  OR -	date of the first Office Action on the merits.
		(4)	It is being filed before the mail continued examination	ing of a first Office Action after the filing of a request for under § 1.114

mailing date of the earlier of a final office action under § 1.113, a notice of allowance under § 1. an action that otherwise closes prosecution in the application, then:								
	a certification as specified in § 1.97(e) is provided below; or							
$\boxtimes$	a fee of \$180.00 as set forth in § 1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.							

37 C.F.R. § 1.97(c). If this statement is being filed after the period specified in § 1.97(b), but before the

- 37 C.F.R. § 1.97(d). If this statement is being filed after the period specified in § 1.97(c), but on or before payment of the issue fee, then:
  - A. a certification as specified in § 1.97(e) is completed below; and
  - a fee of \$180.00 as set forth in § 1.17(p) is authorized below, enclosed, or included with the
    payment of other papers filed together with this statement.
- Fee Authorization. The Commissioner is hereby authorized to charge the above-referenced fees of \$180 and charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0574 (Docket No. MT-012-IP).

Respectfully submitted,

BEVER, HOFFMAN & HARMS, LLP

Dated: November 8, 2006

Telephone: (925) 895-3545 Customer No. 22888

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PTO/SB/08A (08-03) Approved for use through 07/31/2006, OMB 0661-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid CMB control nur Application Number 10/645.861-7697 Substitute for form 1449A/PTO Filing Date \$/20/2003 INFORMATION DISCLOSURE First Named Inventor: Wingyu Leung STATEMENT BY APPLICANT Examiner: Stephen M. Baker GROUP: 2133 (Use as many sheets as necessary) 5 Sheet Attorney Docket Number | MST-012-1P U.S. PATENT DOCUMENTS Publication Date Name of Patentee or Pages, Columns, Lines Examiner Cited Document Number Initials\* No. Number - Kind Code MM-DD-YYYY Applicant of Cited Document Where Relevant Passages or Figures Appear FO1 US-3.814.921 06/04/1974 Nibby et al. F02 US-3 969 706 07/13/1976 Procbsting et al. F03 US-4.045.783 08/30/1977 Harland F04 Nakan US-4,389,714 06/71/1983 F05 US-4,768,197 02/30/1922 Petolino et al. FNS US-4.839.868 06/13/1989 Sato et al. F07 US-4,884,271 11/72/1929 Conche et al FO8 US-4.933.904 06/12/1990 Stewart et al. FNQ US-5.008.886 04/16/1991 Chinnaswamy et al. HS-5 235 693 F10 08/10/1993 Chinnaswamy et al. F11 US-5.241.503 08/31/1993 Cheng FOREIGN PATENT DOCUMENTS Publication Pages, Columns, Lines Initials\* Foreign Patent Document Date Name of Patentee or Where Relevant MM-DD-Applicant of Cited T Passages or Figures Cntry Code<sup>3</sup> Number<sup>4</sup> Kind Code<sup>5</sup>nta YYYY Document Appear OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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						PATENT DOG	UMENTS			
Examiner Initials*	No.		Number - Kind Code 20/2000			Publication Date Name of Patentee or MM-DD-YYYY Applicant of Cited Document			Pages, Columns, L Where Relevant Passa Figures Appear	ages o
	F12		US-5,289,584			02/22/1994	Thome et al.			
	F13		US-5,369,6	i51		11/29/1994	Marisetty			
	F14		US-5,402,389 US-5,430,742 US-5,469,558			03/28/1995	03/28/1995 Flannagan et al. 07/04/1995 Jeddeloh et al. 11/21/1995 Lieberman et al.			
	F15	T				07/04/1995				
	F16	T				11/21/1995				
	F17	1	US-5,502,835			03/26/1996	Le et al.	Le et al.		_
	F18	US-5,513,148		48		04/30/1996 Zagar 05/21/1996 Culley et al.				_
	F19	T	US-5,519,839 US-5,519,847 US-5,579,267 US-5,586,282							-
	F20	ī				05/21/1996	Fandrich et al	L		
	F21	I				11/26/1996	Koshikawa Imo et al.			_
	F22	ı				12/17/1996				
					FORE	IGN PATENT DO	CUMENTS			_
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					S. PATENT DOG	CUMENTS			
Examiner Initials*	No.	d ] Num	Document ) ber - Kind	Code 20/2000	Publication Date MM-DD-YYYY		Patentee or Cited Document	Pages, Columns, Lines Where Relevant Passages of Figures Appear	
	F23	US-5	US-5,592,435		01/07/1997	Mills et al.			
	F24	US-5	US-5,615,169		03/25/1997	Leung			
	F25	US-5	US-5,671,187		09/23/1997	Childers et al.			
	F26	US-5	US-5,687,353		11/11/1997	Chen et al.			
	F27	US-5	US-5,708,624		01/13/1998 Leung				
	F28	US-5	US-5,778,237		07/07/1998 Yamaznoto et		al.		
	F29	US-5	US-5,829,026		10/27/1998 Leung et al.				
	F30	US-6	US-6,020,773		02/01/2000	Kan et al.  Dasgupta  Karpuszka et al.			
	F31	US-6	US-6,052,011		04/18/2000				
	F32	US-6,	US-6,701,480		03/02/2004				
	F33	US-6,	US-6,738,883 B2		05/18/2004	March et al.			
				FOR	EIGN PATENT D	DCUMENTS			
Examiner Initials*	No. 1	Cite		Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines Where Relevant Passages or Figures Appear	т	
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Approved for use through 07/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Application Number

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					U.	S. PATENT DOC	UMENTS				
Examiner Initials*	No.		Document Number Number - Kind Code 20/200000			Publication Date MM-DD-YYYY		Name of Patentee or Pages, Colum Applicant of Cited Document Where Relevant Figures A:		Passages o	
	F34		US-6,854,059		B2	02/08/2005	Gardner				
	F35		US-7,064,993 US-7,099,216 US-2002/0029365		B2 B2	06/20/2006	Gyohten et al.  Luk et al.  Sato et al.				
	F36					08/29/2006					
	F37				Al	03/07/2002					
	F38		US-2004/0039883		Al	02/26/2004 LaBerge et al.		l.			
	F39		US-2004/0044943		Al	03/04/2004	Jacquet et al.				
	F40		US-2004/0064646		Al	04/01/2004	Emerson et al.				
	F41		US-2004/0172504		Al	09/02/2004	Balazich et al	al.			
	F42		US-2004/0	213064	A1	10/28/2004	Gyohten et al				
	F43		US-2005/0	185492	Al	08/25/2005	Harrand				
	F44		US-2006/0034132		Al	02/16/2006 Jain					
					FOR	EIGN PATENT D	DCUMENTS				
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					U.	S. PA	TENT DOC	UMENTS				
Examiner Cited Document Number Initials* No.   Number - Kind Code 2020							Publication Date Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines Where Relevant Passages or Figures Appear			
	F45		US-2006/0	80589	A1	04/13/2006		Holm et al.				
	F46		US-2006/0156196 US-2006/0158950		Al	07	07/13/2006 Takahashi e		al.			
	F47				ΑI	07	/20/2006	Klein				
	F48		US-2006/0200723		Al	09	/07/2006	Carnevale et al.				
	F49		US-2006/0200728		Al	09	/07/2006	Nagai et al.				
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			OTHER	DOCTE	MENTS (	Includ	ing Author.	Title, Date, Pe	rtinent Pages	Fte )		
	Bone	tura	nt, D. "15ns	ec Enha	nced DR	AM Up	ogrades System	n Performance	in 72-Pin SIM	M Socket", Silicon Va	licy	
	Personal Computer Design Conference Proceedings, Date Unknown, pp. 81-86  Dosska et al. "A 100-Mix 4-Mb Cache DRAM with Fast Copp-Back Scheme", IEEE Journal of Solid-State Circuits, Vol. 27, No. 11, Nov. 1992, pp. 1534-1539  Circuits, Vol. 27, No. 11, Nov. 1992, pp. 1534-1549.											
			rt al. "A Ful No. 9, Sep.				re for Synchr	onous DRAM's	", IEEE Journa	al of Solid-State Circui	ts,	
	Penti	um	Processor 3	3V Pip	elined BSI	RAMS	Specification,	Ver. 2.0, Intel	Corp., 25 May	1995, pp. 1-44		
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